



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/503,506	02/14/2000	Sang-seo Lee	Q57599	6707
7590	02/06/2004		EXAMINER	
Sughrue Mion Zinn MACPeak & Seas 2100 Pennsylvania Avenue N. W. Washington, DC 20037-3202			BLAIR, DOUGLAS B	
			ART UNIT	PAPER NUMBER
			2142	16
DATE MAILED: 02/06/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/503,506	LEE, SANG-SEO
	<b>Examiner</b>	<b>Art Unit</b>
	Douglas B Blair	2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on 09 January 2004.

2a)  This action is **FINAL**.                            2b)  This action is non-final.

3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-8 and 16-23 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-8 and 16-23 is/are rejected.

7)  Claim(s) \_\_\_\_\_ is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on \_\_\_\_\_ is/are: a)  accepted or b)  objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)  The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

12)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a)  All b)  Some \* c)  None of:  
1.  Certified copies of the priority documents have been received.  
2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

13)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a)  The translation of the foreign language provisional application has been received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) 14 .  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_ .  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_ .

## **DETAILED ACTION**

### ***Response to Amendment***

1. Applicant's request for reconsideration of the finality of the rejection of the last Office action is persuasive and, therefore, the finality of that action is withdrawn.

### ***Double Patenting***

2. Claims 1, 5-8, 16, and 20-23 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-11 of U.S. Patent No. 6,597,918. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1-11 of U.S. Patent No. 6,597,918 claim the same subject matter as claimed by claims 1, 5-8, 16 and 20-23.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-3, 5-8, 16-18 and 20-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,400,958 to Isomursu et al. in view of U.S. Patent Number 6,185,208 to Liao.

5. As to claim 1, Isomursu teaches a data sending protocol using a short message service (col. 5, lines 52-65), the transmission protocol comprising the steps of: (a) inserting a data

connection service identifier into a user data field (col. 6, lines 29-60, the application identifier); (b) segmenting input message data into a plurality of short message data fields and inserting a segmented message data field, and a field indicating a current short message number, into the user data field (col. 6, lines 1-28); (c) generating a short message field using the user data field (col. 6, lines 1-28); and (d) transmitting the short message field (col. 6, lines 29-60); however Isomursu does not explicitly teach a field indicating the number of short messages.

Liao teaches a field indicating the number of segmented short messages (col. 5, lines 17-55).

It would have been obvious to one of ordinary skill in the Computer Networking art at the time of the invention to combine the teachings of Isomursu regarding the provision of short message service with longer messages with the teachings of Liao regarding the a field indicating the number of segmented short messages because indicating the total number of messages in a longer message allows the receiver to reconstruct the original longer message (Liao, col. 5, lines 17-55).

6. As to claim 2, Isomursu teaches the data sending protocol of claim 1, wherein the step (a) uses a code for data connection service identifier which is not used in an ASCII code table (col. 6, lines 38-41).

7. As to claim 3, Isomursu teaches the data sending protocol of claim 1, wherein the step (a) uses a code data connection service identifier which is not used in a KS5601 standard (col. 6, lines 38-41).

8. As to claim 4, neither Isomursu nor Liao teach the use of the codes 98H or 99H; however it would be an obvious design choice to use such codes. It would have been obvious to one of

ordinary skill in the Computer Networking art at the time of the invention to use the codes 98H and 99H because these codes represent arbitrary numbers and therefore would have been obvious choices for a numbered code that is arbitrary.

9. As to claim 5, Isomursu teaches a data sending protocol of claim 1, further comprising a step of (e) inserting a reference number field, which indicates a number for referring to a type of data connection service employed, into a position next to the data connection service identifier in the user data field (col. 22, lines 24-55, the short message identifier.).

10. As to claim 6, Isomursu teaches a data sending protocol of claim 1, further comprising a step of (f) translating a delivery message and extracting an identifier requesting retransmission of data (col. 22, lines 24-55).

11. As to claim 7, Liao teaches a step of extracting a field indicating a total number of short messages (col. 5, lines 17-55) and Isomursu teaches a step of extracting a field indicating a retransmission request short message number (col. 22, lines 24-55).

12. As to claims 16-22, they feature the same limitations as claims 1-7, directed to apparatus for implementing the protocol from claims 1-3 and 5-7, and are thus rejected on the same basis as claims 1-7.

13. Claims 8 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Number 6,400,958 to Isomursu et al. in view of U.S. Patent Number 6,185,208 to Liao in further view of U.S. Patent Number 6,141,550 to Ayabe et al..

14. As to claim 8, Isomursu teaches the data sending protocol of claim 7, wherein the step (f) further comprises generating a short message field using the user data field and retransmitting the

short message field (col. 22, lines 24-55); however Isomursu does not explicitly teach inserting a data field corresponding to the number of the short message.

Ayabe teaches the insertion of, among segmented short messages, a short message data field corresponding to the retransmission request short message number, into a user data field (col. 7, lines 8-24).

It would have been obvious to one of ordinary skill in the Communications engineering art at the time of the invention to combine the teachings of Isomursu regarding a short message service implementation with the teachings of Ayabe regarding the insertion of a data field corresponding to a retransmission request because inserting a number for retransmissions allows a receiver to determine which fields are duplicates (Ayabe, col. 7, lines 8-30).

15. As to claim 23, it features the same limitations as claims 7 and 8 and is thus rejected for the same reasons as claims 7 and 8.

#### *Response to Arguments*

16. Applicant's arguments filed 1/9/2004 with regard to claims 5 and 20 have been fully considered but they are not persuasive. The applicant argues that: a) The cited portion of Isomursu does not refer to a plurality of types of data connection service and b) the cited portion of Isomursu does not disclose anything about inserting a reference number field, or any field, into a position next to the data connection service identifier in the user data field.

17. As to point (a), the application field referred to in the cited portion refers to a plurality of types of data connection services such as those in the chart on column 20.

18. As to point (b), Figure 5 shows the insertion of a reference number field into a portion next to the data connection service identifier field.

***Conclusion***

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas B Blair whose telephone number is 703-305-5267. The examiner can normally be reached on 8:30am-5pm Mon-Fri.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jack Harvey can be reached on 703-305-9705. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3800.

Douglas Blair  
January 28, 2004  
*DBB*

*Jack Harvey*  
JACK B. HARVEY  
SUPERVISORY PATENT EXAMINER